

REMARKS

Claims 1-99 have been canceled without prejudice. Applicants reserve the ability to pursue the same or similar claims in one or more continuing applications. New claims 100-147 have been added. Support for the new claims is found in the specification and claims as filed.

Suggested Restriction Requirement

Applicants suggest the following restriction requirement:

Group I: Claims 100-109 and 141, drawn to systems and methods for analyzing data from a glucose sensor including detecting and replacing at least some signal artifacts, classified in class 702, subclass 191.

Group II: Claims 110-116, drawn to a method for analyzing data from a glucose sensor including a signal artifacts detection step that tests for ischemia proximal to the sensor, classified in class 600, subclass 300.

Group III: Claim 117, drawn to a method for analyzing data from a glucose sensor including detecting transient non-glucose related signal artifacts measuring at least one of rate-of-change, acceleration, and physiologically feasibility of one or more signal values, classified in class 702, subclass 127.

Group IV: Claims 118-126, drawn to a method for analyzing data from a sensor evaluating a severity of the signal artifacts, class 702, subclass 189.

Group V: Claims 127-138, drawn to a method for processing data from a glucose sensor including selectively applying one of a plurality of signal estimation algorithm factors to replace non-glucose related signal artifacts, classified in class 702, subclass 197.

Group VI: Claims 139-140, drawn to a method for processing data from a glucose sensor including estimating future glucose signal values based on historical glucose values, classified in class 600, subclass 347.

Group VII: Claim 142, drawn to a continuous glucose monitoring device including a glucose sensor and a processor, classified in class 600, subclass 365.

Group VIII: Claims 143-147, drawn to systems and methods for analyzing data from a glucose sensor including outputting data representative of one or more estimated glucose values, class 600, subclass 347.

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Applicants hereby elect without traverse the invention of Group I, including Claims 100-109 and 141.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, the Applicants are not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. The Applicants reserve the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that the Applicants have made any disclaimers or disavowals of any subject matter supported by the present application.

Co-Pending Applications of Assignee

Applicant wishes to draw the Examiner's attention to the following co-pending applications of the present application's assignee.

| Serial Number | Title | Filed |
|----------------------|--|--------------|
| 09/916386 | MEMBRANE FOR USE WITH IMPLANTABLE DEVICES | 7/27/2001 |
| 10/768889 | MEMBRANE FOR USE WITH IMPLANTABLE DEVICES | 1/29/2004 |
| 11/021162 | SENSOR HEAD FOR USE WITH IMPLANTABLE DEVICES | 12/22/2004 |
| 08/811473 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 3/4/1997 |
| 09/447227 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 11/22/1999 |
| 11/021046 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 12/22/2004 |
| 10/153356 | TECHNIQUES TO IMPROVE POLYURETHANE MEMBRANES FOR IMPLANTABLE GLUCOSE SENSORS | 5/22/2002 |
| 11/404418 | SILICONE BASED MEMBRANES FOR USE IN IMPLANTABLE GLUCOSE SENSORS | 4/14/2006 |
| 11/280672 | TECHNIQUES TO IMPROVE POLYURETHANE MEMBRANES FOR IMPLANTABLE GLUCOSE SENSORS | 11/16/2005 |

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| 11/280102 | TECHNIQUES TO IMPROVE POLYURETHANE MEMBRANES FOR IMPLANTABLE GLUCOSE SENSORS | 11/16/2005 |
| 10/646333 | OPTIMIZED SENSOR GEOMETRY FOR AN IMPLANTABLE GLUCOSE SENSOR | 8/22/2003 |
| 11/416058 | OPTIMIZED SENSOR GEOMETRY FOR AN IMPLANTABLE GLUCOSE SENSOR | 5/2/2006 |
| 11/416346 | OPTIMIZED SENSOR GEOMETRY FOR AN IMPLANTABLE GLUCOSE SENSOR | 5/2/2006 |
| 11/415631 | OPTIMIZED SENSOR GEOMETRY FOR AN IMPLANTABLE GLUCOSE SENSOR | 5/2/2006 |
| 10/647065 | POROUS MEMBRANES FOR USE WITH IMPLANTABLE DEVICES | 8/22/2003 |
| 10/842716 | BIOINTERFACE MEMBRANES INCORPORATING BIOACTIVE AGENTS | 5/10/2004 |
| 11/416825 | BIOINTERFACE MEMBRANES INCORPORATING BIOACTIVE AGENTS | 5/3/2006 |
| 11/416734 | BIOINTERFACE MEMBRANES INCORPORATING BIOACTIVE AGENTS | 5/3/2006 |
| 11/654135 | POROUS MEMBRANES FOR USE WITH IMPLANTABLE DEVICES | 1/17/2007 |
| 10/633367 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 8/1/2003 |
| 11/201445 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 8/10/2005 |
| 10/896637 | ROLLED ELECTRODE ARRAY AND ITS METHOD FOR MANUFACTURE | 7/21/2004 |
| 10/896639 | OXYGEN ENHANCING MEMBRANE SYSTEMS FOR IMPLANTABLE DEVICES | 7/21/2004 |
| 11/410392 | OXYGEN ENHANCING MEMBRANE SYSTEMS FOR IMPLANTABLE DEVICES | 4/25/2006 |
| 11/675063 | ANALYTE SENSOR | 2/14/2007 |
| 11/410555 | OXYGEN ENHANCING MEMBRANE SYSTEMS FOR IMPLANTABLE DEVICES | 4/25/2006 |
| 10/897377 | ELECTROCHEMICAL SENSORS INCLUDING ELECTRODE SYSTEMS WITH INCREASED OXYGEN GENERATION | 7/21/2004 |
| 10/897312 | ELECTRODE SYSTEMS FOR ELECTROCHEMICAL SENSORS | 7/21/2004 |
| 10/632537 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 8/1/2003 |
| 11/038340 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 1/18/2005 |

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| 10/633404 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 8/1/2003 |
| 11/865660 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 10/1/2007 |
| 10/633329 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 8/1/2003 |
| 10/648849 | SYSTEMS AND METHODS FOR REPLACING SIGNAL ARTIFACTS IN A GLUCOSE SENSOR DATA STREAM | 8/22/2003 |
| 11/498410 | SYSTEMS AND METHODS FOR REPLACING SIGNAL ARTIFACTS IN A GLUCOSE SENSOR DATA STREAM | 8/2/2006 |
| 11/763215 | SILICONE COMPOSITION FOR BIOCOMPATIBLE MEMBRANE | 6/14/2007 |
| 11/007920 | SIGNAL PROCESSING FOR CONTINUOUS ANALYTE SENSOR | 12/8/2004 |
| 10/991353 | AFFINITY DOMAIN FOR ANALYTE SENSOR | 11/16/2004 |
| 11/007635 | SYSTEMS AND METHODS FOR IMPROVING ELECTROCHEMICAL ANALYTE SENSORS | 12/7/2004 |
| 10/991966 | INTEGRATED RECEIVER FOR CONTINUOUS ANALYTE SENSOR | 11/17/2004 |
| 11/055779 | BIOINTERFACE WITH MACRO-AND MICRO-ARCHITECTURE | 2/9/2005 |
| 10/789359 | INTEGRATED DELIVERY DEVICE FOR CONTINUOUS GLUCOSE SENSOR | 2/26/2004 |
| 11/004561 | CALIBRATION TECHNIQUES FOR A CONTINUOUS ANALYTE SENSOR | 12/3/2004 |
| 11/543707 | DUAL ELECTRODE SYSTEM FOR A CONTINUOUS ANALYTE SENSOR | 10/4/2006 |
| 11/543539 | DUAL ELECTRODE SYSTEM FOR A CONTINUOUS ANALYTE SENSOR | 10/4/2006 |
| 11/543683 | DUAL ELECTRODE SYSTEM FOR A CONTINUOUS ANALYTE SENSOR | 10/4/2006 |
| 11/543734 | DUAL ELECTRODE SYSTEM FOR A CONTINUOUS ANALYTE SENSOR | 10/4/2006 |
| 11/034344 | IMPLANTABLE DEVICE WITH IMPROVED RADIO FREQUENCY CAPABILITIES | 1/11/2005 |
| 11/034343 | COMPOSITE MATERIAL FOR IMPLANTABLE DEVICE | 1/11/2005 |
| 10/838912 | IMPLANTABLE ANALYTE SENSOR | 5/3/2004 |
| 10/838909 | IMPLANTABLE ANALYTE SENSOR | 5/3/2004 |
| 10/838658 | IMPLANTABLE ANALYTE SENSOR | 5/3/2004 |

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| 10/885476 | SYSTEMS AND METHODS FOR MANUFACTURE OF AN ANALYTE-MEASURING DEVICE INCLUDING A MEMBRANE SYSTEM | 7/6/2004 |
| 11/077759 | TRANSCUTANEOUS MEDICAL DEVICE WITH VARIABLE STIFFNESS | 3/10/2005 |
| 11/077715 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077883 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077739 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077740 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077765 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/078230 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/078232 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077713 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077693 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077714 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077763 | METHOD AND SYSTEMS FOR INSERTING A TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/077643 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/078072 | TRANSCUTANEOUS ANALYTE SENSOR | 3/10/2005 |
| 11/415593 | TRANSCUTANEOUS ANALYTE SENSOR | 5/2/2006 |
| 11/416375 | TRANSCUTANEOUS ANALYTE SENSOR | 5/2/2006 |
| 11/415999 | TRANSCUTANEOUS ANALYTE SENSOR | 5/2/2006 |
| 11/797520 | TRANSCUTANEOUS ANALYTE SENSOR | 5/3/2007 |
| 11/797521 | TRANSCUTANEOUS ANALYTE SENSOR | 5/3/2007 |
| 11/360262 | ANALYTE SENSOR | 2/22/2006 |
| 11/411656 | ANALYTE SENSOR | 4/26/2006 |
| 11/360299 | ANALYTE SENSOR | 2/22/2006 |
| 11/439630 | ANALYTE SENSOR | 5/23/2006 |
| 11/439559 | ANALYTE SENSOR | 5/23/2006 |
| 11/439800 | ANALYTE SENSOR | 5/23/2006 |
| 11/373628 | SYSTEM AND METHODS FOR PROCESSING ANALYTE SENSOR DATA FOR SENSOR CALIBRATION | 3/9/2006 |
| 11/404929 | ANALYTE SENSING BIOINTERFACE | 4/14/2006 |
| 11/404421 | ANALYTE SENSING BIOINTERFACE | 4/14/2006 |
| 11/404946 | ANALYTE SENSING BIOINTERFACE | 4/14/2006 |

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| 11/335879 | CELLULOSIC-BASED INTERFERENCE DOMAIN FOR AN ANALYTE SENSOR | 1/18/2006 |
| 11/654140 | MEMBRANES FOR AN ANALYTE SENSOR | 1/17/2007 |
| 11/654327 | MEMBRANES FOR AN ANALYTE SENSOR | 1/17/2007 |
| 11/413238 | CELLULOSIC-BASED RESISTANCE DOMAIN FOR AN ANALYTE SENSOR | 4/28/2006 |
| 11/413356 | CELLULOSIC-BASED RESISTANCE DOMAIN FOR AN ANALYTE SENSOR | 4/28/2006 |
| 11/413242 | CELLULOSIC-BASED RESISTANCE DOMAIN FOR AN ANALYTE SENSOR | 4/28/2006 |
| 11/157746 | TRANSCUTANEOUS ANALYTE SENSOR | 6/21/2005 |
| 11/157365 | TRANSCUTANEOUS ANALYTE SENSOR | 6/21/2005 |
| 11/842148 | TRANSCUTANEOUS ANALYTE SENSOR | 8/21/2007 |
| 11/158227 | TRANSCUTANEOUS ANALYTE SENSOR | 6/21/2005 |
| 11/842142 | TRANSCUTANEOUS ANALYTE SENSOR | 8/21/2007 |
| 11/334876 | TRANSCUTANEOUS ANALYTE SENSOR | 1/18/2006 |
| 11/842154 | TRANSCUTANEOUS ANALYTE SENSOR | 8/20/2007 |
| 11/842139 | TRANSCUTANEOUS ANALYTE SENSOR | 8/21/2007 |
| 11/360252 | ANALYTE SENSOR | 2/22/2006 |
| 11/360819 | ANALYTE SENSOR | 2/22/2006 |
| 11/842146 | ANALYTE SENSOR | 8/20/2007 |
| 11/333837 | LOW OXYGEN IN VIVO ANALYTE SENSOR | 1/17/2006 |
| 11/404417 | SILICONE BASED MEMBRANES FOR USE IN IMPLANTABLE GLUCOSE SENSORS | 4/14/2006 |
| 11/360250 | ANALYTE SENSOR | 2/22/2006 |
| 11/842151 | ANALYTE SENSOR | 8/21/2007 |
| 11/543396 | ANALYTE SENSOR | 10/4/2006 |
| 11/543490 | ANALYTE SENSOR | 10/4/2006 |
| 11/543404 | ANALYTE SENSOR | 10/4/2006 |
| 11/691426 | ANALYTE SENSOR | 3/26/2007 |
| 11/691432 | ANALYTE SENSOR | 3/26/2007 |
| 11/691424 | ANALYTE SENSOR | 3/26/2007 |
| 11/691466 | ANALYTE SENSOR | 3/26/2007 |
| 11/750907 | ANALYTE SENSORS HAVING A SIGNAL-TO-NOISE RATIO SUBSTANTIALLY UNAFFECTED BY NON-CONSTANT NOISE | 5/18/2007 |

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| 11/842156 | ANALYTE SENSORS HAVING A SIGNAL-TO-NOISE RATIO SUBSTANTILLY UNAFFECTED BY NON-CONSTANT NOISE | 8/21/2007 |
| 60/942787 | INTEGRATED DELIVERY DEVICE FOR CONTINUOUS GLUCOSE SENSOR | 6/8/2007 |
| 11/855101 | TRANSCUTANEOUS ANALYTE SENSOR | 9/13/2007 |
| 60/978305 | SYSTEM AND METHODS FOR PROCESSING AND DISPLAYING ANALYTE SENSOR DATA | 10/8/2007 |
| 11/515443 | SYSTEMS AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 9/1/2006 |
| 11/515342 | SYSTEMS AND METHODS FOR PROCESSING ANALYTE SENSOR DATA | 9/1/2006 |
| 11/762638 | SYSTEMS AND METHODS FOR REPLACING SIGNAL DATA ARTIFACTS IN A GLUCOSE SENSOR DATA STREAM | 6/13/2007 |
| 11/692154 | DUAL ELECTRODE SYSTEM FOR A CONTINUOUS ANALYTE SENSOR | 3/27/2007 |
| 11/865572 | DUAL ELECTRODE SYSTEM FOR A CONTINUOUS ANALYTE SENSOR | 10/1/2007 |
| 11/681145 | ANALYTE SENSOR | 3/1/2007 |
| 11/503367 | ANALYTE SENSOR | 8/10/2006 |
| 11/842157 | ANALYTE SENSOR | 8/21/2007 |
| 11/690752 | TRANSCUTANEOUS ANALYTE SENSOR | 3/23/2007 |
| 11/734184 | TRANSCUTANEOUS ANALYTE SENSOR | 4/11/2007 |
| 11/734203 | TRANSCUTANEOUS ANALYTE SENSOR | 4/11/2007 |
| 11/734178 | TRANSCUTANEOUS ANALYTE SENSOR | 4/11/2007 |
| 11/842143 | TRANSCUTANEOUS ANALYTE SENSOR | 8/20/2007 |
| 11/445792 | ANALYTE SENSOR | 6/1/2006 |
| 11/842149 | TRANSCUTANEOUS ANALYTE SENSOR | 8/21/2007 |
| 11/546157 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 10/10/2006 |
| 10/846150 | ANALYTE MEASURING DEVICE | 5/14/2004 |
| 09/489588 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 1/21/2000 |
| 10/657843 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 9/9/2003 |
| 09/636369 | SYSTEMS AND METHODS FOR REMOTE MONITORING AND MODULATION OF MEDICAL DEVICES | 8/11/2000 |
| 09/916858 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 7/27/2001 |

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| 11/039269 | DEVICE AND METHOD FOR DETERMINING ANALYTE LEVELS | 1/19/2005 |
| 07/216683 | BIOLOGICAL FLUID MEASURING DEVICE | 7/7/1988 |

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: 10/12/07

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